

Symptoms may include:

- the exit site becomes red, swollen or painful.
- you notice discoloured fluid coming from the exit site.
- you have a temperature.
- have shivers (rigors) when flushing your line or during your parenteral nutrition infusion.

Other problems may include blood clots, air in the line, a break or cut in the line, a blockage in the line. If you are worried speak to a member of staff on the ward. If you are at home, contact a member of your Nutrition Team or visit Accident and Emergency at your local hospital. You will be taught what to look for and how to respond.

How will it affect my life?

Your Dietitian and/or Nutrition Nurse will work with you to understand your normal routine and how feeding can be introduced with as little disruption as possible. To begin with, it is likely that you will be fed over 24 hours. Usually this can be adjusted and you can feed over a shorter time period, e.g. overnight.

If you need longer term feeding at home, you will need to have supplies of parenteral nutrition and equipment where you live. A company will deliver the equipment and your bags of parenteral nutrition. You will be provided with a fridge to store the parenteral nutrition at the correct temperature. Your Nutrition Nurse/Nutrition Team will arrange this for you.

Long term complications

Long term complications of parenteral nutrition can include imbalances of fluid, salts and minerals, high and low blood sugars, and liver problems. Complications can arise from overfeeding and underfeeding. Your nutrition support team will monitor you closely and manage complications should they arise.

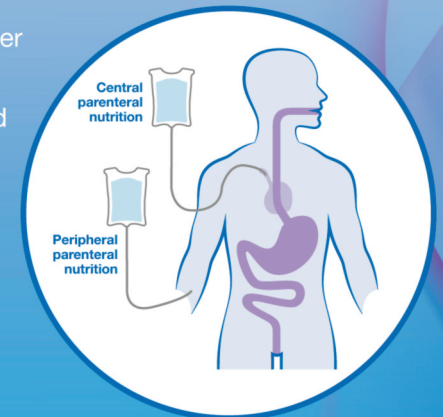
What if I don't want parenteral nutrition?

The decision to have parenteral nutrition can only be made by you and you should be given all the information you need to help you make a decision. Please ask your Nutrition Team member as many questions as you need to.

Parenteral Nutrition

your questions answered

This leaflet has been put together to answer some of the questions that you may have, if your healthcare professional has advised you that you need parenteral nutrition.



This patient information leaflet has been produced by PENG with the support of the NNNG, PINNT and the BDA

Further questions, please contact:

Name:

Job title:

Tel/email:

Further information leaflets are available on the PINNT website: www.pinnt.com



What is parenteral nutrition?

Parenteral nutrition is an artificial way to give your body nutrition (food) and hydration (fluid), when you are unable to eat/drink enough to maintain your weight and hydration normally, or when you are not able to absorb enough nutrition from food and drink.

Parenteral nutrition is a means of giving your body some or all of the nutrition that it needs every day when you cannot obtain all the nutrition you need by other routes i.e. by mouth or tube feeding via the gut.

Parenteral nutrition involves administering a specially formulated nutrient rich liquid directly into your bloodstream, by-passing your gastrointestinal system (stomach, small bowel and large bowel). The specially prepared liquid contains the nutrients your body needs. If you are receiving all your nutrition into your vein (and not from any other way) the parenteral nutrition might also be referred to as total parenteral nutrition (TPN).

How is parenteral nutrition given?

Parenteral nutrition is given intravenously through fine tubing and a catheter dedicated to the purpose of feeding only. The fine tube used to access the vein is often called a 'line'. The liquid is administered with the use of an electronic intravenous feeding pump at a rate chosen by the healthcare team.

Why do I need parenteral nutrition?

There are several reasons why you may need parenteral nutrition.

- Your gastrointestinal tract may not be functioning properly. This could be due to a number of reasons including long-term health conditions or after gut surgery.

If the gut is not working you may hear the term 'intestinal failure' being used.

- Because of your medical condition, you may not be able to eat and drink anything at all, or even if you are able to eat and drink you may not be able to 'absorb' enough from what you eat and drink to obtain all your body needs from the food and drink that you take.

In both situations the need for parenteral nutrition can be temporary (days or weeks) or long-term (months or years).

Who will be involved in my care?

When you are on parenteral nutrition you may be looked after by many types of health care professionals. The roles will vary between hospitals.

Your **consultant** will make the decisions about what type of feeding you are able to have. This might include oral diet (food and drinks), enteral tube feeding (tube feeding into your gut) or parenteral nutrition (feeding directly into your vein).

The **junior doctors** on the ward may take blood and prescribe extra medication related to your feeding such as vitamins.

The **nurses** on the ward will look after your day-to-day care; however, you may also meet specialist nurses who look after your intravenous catheter (feeding line in your vein) and other aspects of your nutrition.

Your **dietitian** will determine your nutritional needs and order your parenteral nutrition bag. They will monitor the effects of the parenteral nutrition and suggest changes to the content as required.

Your **pharmacist** will advise on the content of your bag and ensure the mixture is safe to

give through your feeding line. They will advise on any other drug interactions.

You might be under the care of these professionals who work together as part of a **Nutrition Team**.

What are the benefits for me?

If you have intestinal failure you will be unable to absorb enough nutrition from food to meet your daily needs. Parenteral nutrition will allow you to have fluid and nutrition through your feeding line. Some people will have everything they need through their parenteral nutrition, whereas, some people will only need to 'top up' the nutrition that they have by mouth.

How long will I need parenteral nutrition?

This will depend on the reason why you need parenteral nutrition. You will be closely monitored to ensure you receive it for as long as you need it.

Will I still be able to eat and drink?

Your consultant, dietitian or nutrition team member will be able to advise whether you can eat and drink, and if so, the types of foods and drinks that may be suitable. Their advice will be based on the reason why you need parenteral nutrition and your needs.

What type of line will I have?

There are several different types of lines used for feeding into the blood stream (intravenous access). You may have a line placed in a vein in your arm, neck or chest.

In hospital you might be fed into a small vein (peripheral feeding). This is usually only for **short term feeding**, i.e. less than 14 days. The line may be referred to as a 'peripheral

cannula', or 'mid-line catheter'. This method of feeding might be referred to as peripheral parenteral nutrition (PPN).

For **medium term feeding** it is more common to be fed into a larger, central vein. This could be through a peripherally inserted central catheter (PICC) or a Hickman/Broviac line.

A central venous catheter (CVC), which includes a PICC line, multi-lumen central line or Hickman line, is a long fine hollow tube with an opening at each end. One end provides access from outside your body to the other end which is situated in a large vein in the body.

For **long term feeding**, a Hickman or PICC line is usually inserted. These lines can remain in position for several months or years. The line is only to be used for the administration of your parenteral nutrition.

Who will care for my line?

Nursing staff that have been trained will care for your line. Medical and nursing staff that have not been trained must not access your line. Please contact your Nutrition Nurse for advice.

If you need parenteral nutrition for a long time, a discussion with your Nutrition Nurse Specialist will take place about receiving your parenteral nutrition at home. You may receive specialised nursing support at home, or you or your carer will be trained to manage your parenteral nutrition at home. Training can take 2-3 weeks or sometimes longer.

What can go wrong and what to look out for

It is possible for an infection to develop either inside the line or around the exit site.